

Amendments to the Claims

This listing of claim will replace all prior versions and listings of claim in the application.

1) (currently amended) A hand-held device for providing communication between a ~~wide-area-network~~ cellular network and a wireless local area network, comprising:

a first transceiver to communicate with the cellular network using cellular signals;

a second transceiver to communicate with the wireless local area network using short-range radio signals;

(a) a storage device;

(b) a processor coupled to the storage device; and,

(c) wherein the storage device stores a router software component ~~for transferring to transfer~~ a packet between the ~~wide-area-network~~ cellular network and the wireless local area network using the short-range radio signals and an interface software component to add a first network service software component that provides a network service to the wireless local area network,

wherein the first network service software component is loaded into the storage device from a processing device coupled to the cellular network.

2) (previously presented) The hand-held device of claim 1, wherein the packet is an Internet Protocol ("IP") packet.

3) (previously presented) The hand-held device of claim 1, wherein the wide area network includes a plurality of public IP addresses and the wireless local area network includes a plurality of private IP addresses, and wherein the router software component translates a first IP address in the plurality of public IP addresses to a second IP address in the plurality of private IP addresses.

4) (cancelled)

5) (currently amended) The hand-held device of claim 1, wherein the ~~wide-areas network~~ the cellular network is coupled to the Internet.

6) (cancelled)

7) (currently amended) The hand-held device of claim 1, wherein ~~the wide area network includes~~ the cellular network is coupled to a corporate network.

8) (currently amended) The hand-held device of claim 1, wherein ~~the wide area network includes~~ the cellular network is coupled to a private IP network.

9) (previously presented) The hand-held device of claim 1, wherein the wireless local area network is a Bluetooth™ wireless local area network.

10) (previously presented) The hand-held device of claim 1, wherein the wireless local area network is a 802.11 wireless local area network.

11) (currently amended) The hand-held device of claim 1, wherein the router software component includes a network address translator ("NAT") software component for translating to translate between a first wide area network address and a first local area network address.

12) (currently amended) The hand-held device of claim 1, wherein the router software component includes a network address port translation ("NAPT") software component for translating to translate between a first wide area network address and a first local area network address.

13) (currently amended) The hand-held device of claim 1, wherein the router software component includes a local routing software component for routing to route an IP packet between a first wireless device in the wireless local area network and a second wireless device in the wireless local area network.

14-16) (cancelled)

17) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network service software component is a pairing management software component for determining to determine whether a first wireless device is coupled to the wireless local area network, responsive to a signal from the ~~managing processing device in the wide area network~~.

18) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network

service software component is a virtual private network software component ~~for establishing to~~
establish a secure link.

19) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network service software component is a firewall software component.

20) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network service software component is a statistics software component ~~for collecting to collect~~ usage information of the wireless local area network.

21) (previously presented) The hand-held device of claim 20, wherein the statistics software component collects usage information of a first wireless device in the wireless local area network.

22) (previously presented) The hand-held device of claim 20, wherein the statistics software component collects usage information of an application software component in a first wireless device in the wireless local area network.

23) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network service software component includes a link optimization software component ~~for converting to convert~~ an IP packet from a first wireless device in the wireless local area network to an optimized cellular protocol packet ~~transferred to a processing device in the wide area network~~.

24) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network service software component includes a reverse firewall software component ~~for dropping to drop~~ a packet from a first wireless device in the wireless local area network.

25) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network service software component includes a reverse firewall software component ~~for dropping to drop~~ a packet from a first application software component on a first wireless device in the wireless local area network.

26) (currently amended) The hand-held device of claim 1 ~~14~~, wherein the first network

service software component includes a flashing software component ~~for providing to provide~~ a flash image to a first wireless device, in the wireless local area network, ~~for updating to update capability of the~~ a first wireless device ~~capability~~.

27) (currently amended) The hand-held device of claim 1-14, wherein the first network service software component includes a flashing software component ~~for providing to provide~~ a flash image to a first wireless device, in the wireless local area network, ~~for repairing that repairs the~~ a first wireless device ~~capability~~.

28) (currently amended) The hand-held device of claim 1-14, wherein the first network service software component includes a flashing software component ~~for providing to provide~~ a flash image to a first wireless device, in the wireless local area network, ~~for adding to add capability of the~~ a first wireless device ~~capability~~.

29) (currently amended) The hand-held device of claim 1-14, wherein the first network service software component is a message software component ~~for providing to provide~~ a message between a first wireless device and a second wireless device in the wireless local area network.

30) (currently amended) The hand-held device of claim 1-14, wherein the first network service software component is a service level enforcement software component ~~for limiting to limit~~ an amount of packets transferred from a first wireless device in the wireless local area network to the ~~wide area~~ cellular network during a period of time.

31) (currently amended) The hand-held device of claim 1-14, wherein the first network service software component is a Bluetooth™ LAN Access Profile software component.

32) (currently amended) The hand-held device of claim 1-14, wherein the first network service software component is a Bluetooth™ Dial-Up Profile ~~Software~~ software component.

33) (currently amended) The hand-held device of claim 1-14, wherein the first network service software component is a Virtual Bluetooth™ Dial-Up Profile ~~Software~~ software component ~~for providing to provide~~ packet switching in response to a circuit switching signal.

34) (currently amended) A system for providing communication between a wide area network and a wireless local area network, comprising:

(a) hand-held wireless device having a cellular transceiver for communicating with the wide area network and having a storage device ~~for storing to store~~ a routing software component for transferring that transfers a plurality of packets between the wide area network and the wireless local area network using short-range radio signals and an interface software component to add a first network service software component that provides a network service to the wireless local area network,

wherein the first network service software component is loaded into the storage device from a processing device coupled to the cellular network,

wherein the hand-held wireless device has a wide area network address; ~~and,~~

(b) a first wireless device having a 2.4 GHz short-range transceiver ~~for transferring to transfer~~ a first packet in the plurality of packets to the hand-held wireless device, wherein the first wireless device has a first local area network address, and

a second wireless device having a short-range transceiver to transfer a second packet in the plurality of packets to the hand-held wireless device, wherein the second wireless device has a second local area network address.

35) (previously presented) The system of claim 34, wherein the first wireless device is selected from a group consisting of a desktop computer, a laptop computer, a personal digital assistant, a headset, a pager, a printer, a watch, a digital camera and an equivalent.

36) (previously presented) The system of claim 34, wherein the hand-held wireless device is a cellular telephone using a Global System for Mobile communications ("GSM") protocol.

37) (previously presented) The system of claim 34, wherein the hand-held wireless device is a cellular telephone using a Code Division Multiple Access ("CDMA") protocol.

38) (previously presented) The system of claim 34, wherein the hand-held wireless device is a cellular telephone using a CDMA2000 protocol.

39) (previously presented) The system of claim 34, wherein the hand-held wireless device is a cellular telephone using a Universal Mobile Telecommunications System ("UMTS") protocol.

40) (previously presented) The system of claim 34, wherein the hand-held wireless device is a cellular telephone using a Time Division Multiple Access ("TDMA") protocol.

41) (cancelled)

42) (currently amended) An article of manufacture, including a computer readable medium, comprising:

(a) a routing software component ~~for translating~~ to translate between a wide area network address and a local area network address;

(b) a short-range radio software component ~~for providing~~ to provide a short-range radio signal in a wireless local area network; ~~and,~~

(c) a cellular software component ~~for providing~~ to provide a communication signal in a cellular network; and,

an interface software component to allow a network service software component to be added using the communication signal from the cellular network.

43) (cancelled)

44) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a pairing management software component ~~for determining~~ to determine whether a first wireless device is coupled to the wireless local area network, responsive to a signal from a ~~managing~~ processing device in the cellular network.

45) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a virtual private network software component ~~for establishing~~ to establish a secure link.

46) (previously presented) The article of manufacture of claim 42, wherein the network service software component is a firewall software component.

47) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a statistics software component ~~for collecting~~ to collect usage

information of the wireless local area network.

48) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a link optimization software component ~~for converting~~ to convert an IP packet from a first wireless device in the wireless local area network to an optimized cellular protocol packet ~~transferred to a processing device in the cellular network~~.

49) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a reverse firewall software component ~~for dropping~~ to drop a packet from a first wireless device in the wireless local area network.

50) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a reverse firewall software component ~~for dropping~~ to drop a packet from a first application software component on a first wireless device in the wireless local area network.

51) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a flashing software component ~~for providing~~ to provide a flash image to a first wireless device in the wireless local area network.

52) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a message software component ~~for providing~~ to provide a message between a first wireless device and a second wireless device in the wireless local area network.

53) (currently amended) The article of manufacture of claim 42, wherein the network service software component is a service level enforcement software component ~~for limiting~~ to limit an amount of packets transferred from a first wireless device in the wireless local area network to the cellular network during a period of time.

54) (currently amended) A system, comprising:
(a) a managing processing device in a first wide area network;
(b) a hand-held device, coupled to the managing processing device and in a wireless local area network, having a routing software component ~~for transferring~~ to transfer a plurality of packets

between the first wide area network and the wireless local area network using short-range radio signals and an interface software component to add a first network service software component that provides a network service to the wireless local area network.

wherein the first network service software component is loaded onto the hand-held device from the managing processing device using cellular signals from the first wide area network; and,

(e) a device, coupled to the hand-held device and in the local area network, ~~for transferring to transfer~~ a first packet in the plurality of packets to the hand-held device,

wherein the managing processing device has a managing software component to enable the loaded first network service software component.

55-57) (cancelled)

58) (previously presented) The system of claim 54, wherein the routing software component tunnels the plurality of packets to the managing processing device and wherein the managing processing device processes the plurality of packets.

59) (previously presented) The system of claim 54, wherein the routing software component maintains a first IP session link with the first wide area network and a second IP session link with a second wide area network.

60) (previously presented) The system of claim 54, wherein the routing software component maintains a first IP session link with the first wide area network responsive to the amount of IP packets received.

61) (previously presented) The system of claim 54, wherein the routing software component initiates a first IP session link with the first wide area network responsive to a signal from the managing processing device.

62-64) (cancelled)